


[Subscribe \(Full Service\)](#) [Register \(Limited Service, Free\)](#) [Login](#)
Search: The ACM Digital Library The Guide

 +"context switch", +"block split", grant lock, denies lock mess;

THE ACM DIGITAL LIBRARY

[Feedback](#) [Report a problem](#) [Satisfaction survey](#)

Terms used [context switch block](#)
[split grant lock denies lock message notification](#)

Found 3 of 200,192

 Sort results
by

 relevance
 [Save results to a Binder](#)

 Display
results

 expanded form
 [Search Tips](#)
 Open results in a new
window

 Try an [Advanced Search](#)

 Try this search in [The ACM Guide](#)

Results 1 - 3 of 3

Relevance scale



1 A high-performance object-oriented memory

Craig Hyatt

 September 1993 **ACM SIGARCH Computer Architecture News**, Volume 21 Issue 4

Publisher: ACM Press

 Full text available: [pdf\(919.75 KB\)](#) Additional Information: [full citation](#), [abstract](#), [index terms](#)

The proposed design places a high-performance object memory in a portable peripheral that relieves the host CPU of the burden of object address translation and the constant management of live objects. This flexible approach is designed for the newest generation of high-performance workstations running 32-bit Smalltalk, Lisp, C++ and other COP (object oriented programming) environments. With a two-layer cache and 50ns DRAM object memory, the hardware is capable of accessing object data (including ...)

Keywords: RISC, binary-buddy allocation, capability-based protection



2 Wisconsin Architectural Research Tool Set

Mark D. Hill, James R. Larus, Alvin R. Lebeck, Madhusudhan Talluri, David A. Wood

 September 1993 **ACM SIGARCH Computer Architecture News**, Volume 21 Issue 4

Publisher: ACM Press

 Full text available: [pdf\(1.16 MB\)](#) Additional Information: [full citation](#), [citations](#), [index terms](#)


3 Technical session 7: multimedia systems: Implementation and evaluation of EXT3NS



multimedia file system

Baik-Song Ahn, Sung-Hoon Sohn, Chei-Yol Kim, Gyu-II Cha, Yun-Cheol Baek, Sung-In Jung, Myung-Joon Kim

 October 2004 **Proceedings of the 12th annual ACM international conference on Multimedia MULTIMEDIA '04**
Publisher: ACM Press

 Full text available: [pdf\(524.49 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)


The EXT3NS is a scalable file system designed to handle video streaming workload in large-scale on-demand streaming services. It is based on a special H/W device, called Network-Storage card (NS card), which aims at accelerating streaming operation by shortening the data path from storage device to network interface. The design objective

of EXT3NS is to minimize the delay and the delay variance of I/O request in the sequential workload on NS card. Metadata structure, file organization, metada ...

Keywords: file system, multimedia, streaming, video server

Results 1 - 3 of 3

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2007 ACM, Inc.

[Terms of Usage](#) [Privacy Policy](#) [Code of Ethics](#) [Contact Us](#)

Useful downloads:  [Adobe Acrobat](#)  [QuickTime](#)  [Windows Media Player](#)  [Real Player](#)



[Subscribe \(Full Service\)](#) [Register \(Limited Service, Free\)](#) [Login](#)

Search: The ACM Digital Library The Guide

+share +resource, +block +split, +lock, +Oracle message, no

SEARCH

THE ACM DIGITAL LIBRARY

[Feedback](#) [Report a problem](#) [Satisfaction survey](#)

Terms used

[share](#) [resource](#) [block](#) [split](#) [lock](#) [Oracle](#) [message](#) [notification](#)

Found 43 of 200,192

Sort results
by

[Save results to a Binder](#)

Try an [Advanced Search](#)

Display
results

[Search Tips](#)

Try this search in [The ACM Guide](#)

[Open results in a new window](#)

Results 1 - 20 of 43

Result page: **1** [2](#) [3](#) [next](#)

Relevance scale

1 [Fast detection of communication patterns in distributed executions](#)

Thomas Kunz, Michiel F. H. Seuren

November 1997 **Proceedings of the 1997 conference of the Centre for Advanced Studies on Collaborative research CASCON '97**

Publisher: IBM Press

Full text available: [pdf\(4.21 MB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Understanding distributed applications is a tedious and difficult task. Visualizations based on process-time diagrams are often used to obtain a better understanding of the execution of the application. The visualization tool we use is Poet, an event tracer developed at the University of Waterloo. However, these diagrams are often very complex and do not provide the user with the desired overview of the application. In our experience, such tools display repeated occurrences of non-trivial commun ...

2 [Empirical performance evaluation of concurrency and coherency control protocols for database sharing systems](#)

Erhard Rahm

June 1993 **ACM Transactions on Database Systems (TODS)**, Volume 18 Issue 2

Publisher: ACM Press

Full text available: [pdf\(3.37 MB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#), [review](#)

Database Sharing (DB-sharing) refers to a general approach for building a distributed high performance transaction system. The nodes of a DB-sharing system are locally coupled via a high-speed interconnect and share a common database at the disk level. This is also known as a "shared disk" approach. We compare database sharing with the database partitioning (shared nothing) approach and discuss the functional DBMS components that require new and coordinated solutions for DB-shar ...

Keywords: coherency control, concurrency control, database partitioning, database sharing, performance analysis, shared disk, shared nothing, trace-driven simulation

3 [A predicate-based caching scheme for client-server database architectures](#)

Arthur M. Keller, Julie Basu

January 1996 **The VLDB Journal — The International Journal on Very Large Data Bases**, Volume 5 Issue 1

Publisher: Springer-Verlag New York, Inc.

Full text available: [pdf\(162.80 KB\)](#) Additional Information: [full citation](#), [abstract](#), [citations](#), [index terms](#)

We propose a new client-side data-caching scheme for relational databases with a central server and multiple clients. Data are loaded into each client cache based on queries executed on the central database at the server. These queries are used to form predicates that describe the cache contents. A subsequent query at the client may be satisfied in its local cache if we can determine that the query result is entirely contained in the cache. This issue is called *cache completeness*. A separ ...

Keywords: Cache completeness, Cache currency, Caching, Multiple clients, Relational databases

4 Rover: a toolkit for mobile information access

 A. D. Joseph, A. F. de Lespinasse, J. A. Tauber, D. K. Gifford, M. F. Kaashoek
December 1995 **ACM SIGOPS Operating Systems Review, Proceedings of the fifteenth ACM symposium on Operating systems principles SOSP '95**, Volume 29 Issue 5

Publisher: ACM Press

Full text available: [pdf\(2.18 MB\)](#) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

5 Reservations for Conflict Avoidance in a Mobile Database System

 Nuno Preguiça, J. Legatheaux Martins, Miguel Cunha, Henrique Domingos
May 2003 **Proceedings of the 1st international conference on Mobile systems, applications and services MobiSys '03**

Publisher: ACM Press

Full text available: [pdf\(287.63 KB\)](#) Additional Information: [full citation](#)

6 Specification and implementation of exceptions in workflow management systems

 Fabio Casati, Stefano Ceri, Stefano Paraboschi, Giuseppe Pozzi
September 1999 **ACM Transactions on Database Systems (TODS)**, Volume 24 Issue 3

Publisher: ACM Press

Full text available: [pdf\(250.40 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Although workflow management systems are most applicable when an organization follows standard business processes and routines, any of these processes faces the need for handling exceptions, i.e., asynchronous and anomalous situations that fall outside the normal control flow. In this paper we concentrate upon anomalous situations that, although unusual, are part of the semantics of workflow applications, and should be specified and monitored coherently; in most real-life applica ...

Keywords: active rules, asynchronous events, exceptions, workflow management systems

7 The relational model for database management: version 2

E. F. Codd
January 1990 Book

Publisher: Addison-Wesley Longman Publishing Co., Inc.

Full text available: [pdf\(28.61 MB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#), [review](#)

From the Preface (See Front Matter for full Preface)

An important adjunct to precision is a sound theoretical foundation. The relational model is solidly based on two parts of mathematics: firstorder predicate logic and the theory of relations. This book, however, does not dwell on the theoretical foundations, but rather on all the features of the relational model that I now perceive as important for database users, and therefore for DBMS vendors. My perceptions result from 20 y ...

8 A publish/subscribe CORBA persistent state service prototype

C. Liebig, M. Cilia, M. Betz, A. Buchmann

April 2000 **IFIP/ACM International Conference on Distributed systems platforms Middleware '00**

Publisher: Springer-Verlag New York, Inc.

Full text available:  pdf(283.92 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#)

An important class of information dissemination applications requires 1:n communication and access to persistent datastores. CORBA's new Persistent State Service combined with messaging capabilities offer the possibility of efficiently realizing information brokers between data sources and CORBA clients. In this paper we present a prototype implementation of the PSS that exploits the reliable multicast capabilities of an existing middleware platform. This publish/subscribe architecture makes ...

9 Charles W. Bachman interview: September 25-26, 2004; Tucson, Arizona

 Thomas Haigh

January 2006 **ACM Oral History interviews**

Publisher: ACM Press

Full text available:  pdf(761.66 KB) Additional Information: [full citation](#), [abstract](#)

Charles W. Bachman reviews his career. Born during 1924 in Kansas, Bachman attended high school in East Lansing, Michigan before joining the Army Anti Aircraft Artillery Corp, with which he spent two years in the Southwest Pacific Theater, during World War II.

After his discharge from the military, Bachman earned a B.Sc. in Mechanical Engineering in 1948, followed immediately by an M.Sc. in the same discipline, from the University of Pennsylvania. On graduation, he went to work for Do ...

10 Transactional workflow paradigm: its application to mobile computing

 V. K. Murthy

February 1998 **Proceedings of the 1998 ACM symposium on Applied Computing SAC '98**

Publisher: ACM Press

Full text available:  pdf(997.50 KB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

Keywords: agents, intention-action protocols, mobile transactions, serializability, workflow

11 Optimistic replication

 Yasushi Saito, Marc Shapiro

March 2005 **ACM Computing Surveys (CSUR)**, Volume 37 Issue 1

Publisher: ACM Press

Full text available:  pdf(656.72 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Data replication is a key technology in distributed systems that enables higher availability and performance. This article surveys optimistic replication algorithms. They allow replica

contents to diverge in the short term to support concurrent work practices and tolerate failures in low-quality communication links. The importance of such techniques is increasing as collaboration through wide-area and mobile networks becomes popular. Optimistic replication deploys algorithms not seen in tradition ...

Keywords: Replication, disconnected operation, distributed systems, large scale systems, optimistic techniques

12 Deadlock detection in distributed database systems: a new algorithm and a comparative performance analysis

Natalija Krivokapić, Alfons Kemper, Ehud Gudes

October 1999 **The VLDB Journal — The International Journal on Very Large Data Bases**, Volume 8 Issue 2

Publisher: Springer-Verlag New York, Inc.

Full text available:  [pdf\(289.96 KB\)](#) Additional Information: [full citation](#), [abstract](#), [citations](#), [index terms](#)

This paper attempts a comprehensive study of deadlock detection in distributed database systems. First, the two predominant deadlock models in these systems and the four different distributed deadlock detection approaches are discussed. Afterwards, a new deadlock detection algorithm is presented. The algorithm is based on dynamically creating *deadlock detection agents* (DDAs), each being responsible for detecting deadlocks in one connected component of the global wait-for-graph (WFG). The ...

Keywords: Comparative performance analysis, Deadlock detection, Distributed database systems, Simulation study

13 An introduction to data warehousing: what are the implications for the network?

Katherine Jones

February 1998 **International Journal of Network Management**, Volume 8 Issue 1

Publisher: John Wiley & Sons, Inc.

Full text available:  [pdf\(145.35 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Data warehousing is an information systems environment, rather than a product. It has emerged as an essential business entity for sophisticated analysis of data. This article presents a clear overview of the implications of data warehousing for business. © 1998 John Wiley & Sons, Ltd.

14 Temporal Streaming of Shared Memory

 Thomas F. Wenisch, Stephen Somogyi, Nikolaos Hardavellas, Jangwoo Kim, Anastassia Ailamaki, Babak Falsafi

May 2005 **ACM SIGARCH Computer Architecture News , Proceedings of the 32nd Annual International Symposium on Computer Architecture ISCA '05**, Volume 33 Issue 2

Publisher: IEEE Computer Society, ACM Press

Full text available:  [pdf\(206.25 KB\)](#) Additional Information: [full citation](#), [abstract](#), [index terms](#)

Coherent read misses in shared-memory multiprocessors account for a substantial fraction of execution time in many important scientific and commercial workloads. We propose Temporal Streaming, to eliminate coherent read misses by streaming data to a processor in advance of the corresponding memory accesses. Temporal streaming dynamically identifies address sequences to be streamed by exploiting two common phenomena in shared-memory access patterns: (1) temporal address correlation & groups of sh ...

15 Frangipani: a scalable distributed file system

Chandramohan A, Thekkath, Timothy Mann, Edward K. Lee
 October 1997 **ACM SIGOPS Operating Systems Review , Proceedings of the sixteenth ACM symposium on Operating systems principles SOSP '97**, Volume 31 Issue 5
 Publisher: ACM Press
 Full text available: [pdf\(2.20 MB\)](#) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

16 The KaffeOS Java runtime system

Godmar Back, Wilson C. Hsieh
 July 2005 **ACM Transactions on Programming Languages and Systems (TOPLAS)**, Volume 27 Issue 4
 Publisher: ACM Press

Full text available: [pdf\(704.30 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#), [review](#)

Single-language runtime systems, in the form of Java virtual machines, are widely deployed platforms for executing untrusted mobile code. These runtimes provide some of the features that operating systems provide: interapplication memory protection and basic system services. They do not, however, provide the ability to isolate applications from each other. Neither do they provide the ability to limit the resource consumption of applications. Consequently, the performance of current systems degra ...

Keywords: Robustness, garbage collection, isolation, language runtimes, resource management, termination, virtual machines

17 Reactive provisioning of backend databases in shared dynamic content server clusters

Gokul Soundararajan, Cristiana Amza
 December 2006 **ACM Transactions on Autonomous and Adaptive Systems (TAAS)**, Volume 1 Issue 2
 Publisher: ACM Press

Full text available: [pdf\(928.76 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

This paper introduces a self-configuring architecture for on-demand resource allocation to applications in a shared database cluster. We use a unified approach to load and fault management based on data replication and reactive replica provisioning. While data replication provides scaling and high availability, reactive provisioning dynamically allocates additional replicas to applications in response to peak loads or failure conditions, thus providing per application performance. We design an e ...

Keywords: Autonomic systems, databases, query processing, transactions

18 Performance of database workloads on shared-memory systems with out-of-order processors

Parthasarathy Ranganathan, Kourosh Gharachorloo, Sarita V. Adve, Luiz André Barroso
 October 1998 **ACM SIGPLAN Notices , ACM SIGOPS Operating Systems Review , Proceedings of the eighth international conference on Architectural support for programming languages and operating systems ASPLOS-VIII**, Volume 33 , 32 Issue 11 , 5
 Publisher: ACM Press

Full text available: [pdf\(1.62 MB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Database applications such as online transaction processing (OLTP) and decision support

systems (DSS) constitute the largest and fastest-growing segment of the market for multiprocessor servers. However, most current system designs have been optimized to perform well on scientific and engineering workloads. Given the radically different behavior of database workloads (especially OLTP), it is important to re-evaluate key system design decisions in the context of this important class of applicatio ...

19 Parallel query processing in shared disk database systems



Erhard Rahm

December 1993 **ACM SIGMOD Record**, Volume 22 Issue 4

Publisher: ACM Press

Full text available: [pdf\(715.43 KB\)](#) Additional Information: [full citation](#), [abstract](#), [citations](#), [index terms](#)

System developments and research on parallel query processing have concentrated either on "Shared Everything" or "Shared Nothing" architectures so far. While there are several commercial DBMS based on the "Shared Disk" alternative, this architecture has received very little attention with respect to parallel query processing. A comparison between Shared Disk and Shared Nothing reveals many potential benefits for Shared Disk with respect to parallel query ...

20 B-tree concurrency control and recovery in page-server database systems



Ibrahim Jaluta, Seppo Sippu, Eljas Soisalon-Soininen

March 2006 **ACM Transactions on Database Systems (TODS)**, Volume 31 Issue 1

Publisher: ACM Press

Full text available: [pdf\(401.86 KB\)](#) Additional Information: [full citation](#), [appendices and supplements](#), [abstract](#), [references](#), [index terms](#)

We develop new algorithms for the management of transactions in a page-shipping client-server database system in which the physical database is organized as a sparse B-tree index. Our starvation-free fine-grained locking protocol combines adaptive callbacks with key-range locking and guarantees repeatable-read-level isolation (i.e., serializability) for transactions containing any number of record insertions, record deletions, and key-range scans. Partial and total rollbacks of client transactio ...

Keywords: ARIES, ARIES/CSA, B-tree, cache consistency, callback locking, client-server database system, data shipping, key-range locking, page server, partial rollback, physiological logging, sparse B-tree, structure modification

Results 1 - 20 of 43

Result page: [1](#) [2](#) [3](#) [next](#)

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2007 ACM, Inc.

[Terms of Usage](#) [Privacy Policy](#) [Code of Ethics](#) [Contact Us](#)

Useful downloads: [Adobe Acrobat](#) [QuickTime](#) [Windows Media Player](#) [Real Player](#)

[Subscribe \(Full Service\)](#) [Register \(Limited Service, Free\)](#) [Login](#)Search: The ACM Digital Library The Guide

THE ACM DIGITAL LIBRARY

[Feedback](#) [Report a problem](#) [Satisfaction survey](#)

Cache consistency and concurrency control in a client/server DBMS architecture

Full text [Pdf \(1.06 MB\)](#)**Source** [International Conference on Management of Data archive](#)
[Proceedings of the 1991 ACM SIGMOD international conference on Management of data](#) [table of contents](#)
Denver, Colorado, United States
Pages: 367 - 376
Year of Publication: 1991
ISSN:0163-5808
[Also published in ...](#)**Authors** [Yongdong Wang](#) Computer Science Division-EECS, University of California, Berkeley, CA
[Lawrence A. Rowe](#) Computer Science Division-EECS, University of California, Berkeley, CA**Sponsors** [SIGACT](#): ACM Special Interest Group on Algorithms and Computation Theory
[SIGART](#): ACM Special Interest Group on Artificial Intelligence
[SIGMOD](#): ACM Special Interest Group on Management of Data**Publisher** ACM Press New York, NY, USA**Additional Information:** [references](#) [cited by](#) [index terms](#) [collaborative colleagues](#)**Tools and Actions:** [Find similar Articles](#) [Review this Article](#)
[Save this Article to a Binder](#) [Display Formats: BibTex EndNote ACM Ref](#)**DOI Bookmark:** Use this link to bookmark this Article: <http://doi.acm.org/10.1145/115790.115855>
[What is a DOI?](#)

↑ REFERENCES

Note: OCR errors may be found in this Reference List extracted from the full text article. ACM has opted to expose the complete List rather than only correct and linked references.

- 1 [Rakesh Agrawal , Michael J. Carey , Miron Livny, Models for studying concurrency control performance: alternatives and implications, Proceedings of the 1985 ACM SIGMOD international conference on Management of data, p.108-121, May 1985, Austin, Texas, United States](#)
- 2 [Rakesh Agrawal , Michael J. Carey , Miron Livny, Concurrency control performance modeling: alternatives and implications, ACM Transactions on Database Systems \(TODS\), v.12 n.4, p.609-654, Dec. 1987](#)
- 3 [R. Agrawal , N. H. Gehani, ODE \(Object Database and Environment\): the language and the data model, Proceedings of the 1989 ACM SIGMOD international conference on Management of data, p.36-45, June 1989, Portland, Oregon, United States](#)
- 4 [Timothy Andrews , Craig Harris, Combining language and database advances in an object-oriented development environment, Conference proceedings on Object-oriented programming systems, languages and applications, p.430-440, October 04-08, 1987, Orlando, Florida, United States](#)

- 5 F. Bancilhon , G. Barbedette , V. Benzaken , C. Delobel , S. Gamerman , C. Lecluse , P. Pfeffer , P. Richard , F. Velez, The design and implementation of O2, Lecture notes in computer science on Advances in object-oriented database systems, p.1-22, September 1988, Bad Mu:9Ainster am Stein-Edernburg, Germany
- 6 Philip A. Bernstein , Vassco Hadzilacos , Nathan Goodman, Concurrency control and recovery in database systems, Addison-Wesley Longman Publishing Co., Inc., Boston, MA, 1987
- 7 Robert Bretl , David Maier , Allen Otis , Jason Penney , Bruce Schuchardt , Jacob Stein , E. Harold Williams , Monty Williams, The Gem-Stone data management system, Object-oriented concepts, databases, and applications, ACM Press, New York, NY, 1989
- 8 Michael J. Carey , Miron Livny, Distributed Concurrency Control Performance: A Study of Algorithms, Distribution, and Replication, Proceedings of the 14th International Conference on Very Large Data Bases, p.13-25, August 29-September 01, 1988
- 9 C. J. Date, An introduction to database systems: vol. 1 (5th ed.), Addison-Wesley Longman Publishing Co., Inc., Boston, MA, 1990
- 10 O. Deux et al., The Story of O2, IEEE Transactions on Knowledge and Data Engineering, v.2 n.1, p.91-108, March 1990
- 11 Gerson, D., Personal Communication, March 1989.
- 12 John H. Howard , Michael L. Kazar , Sherri G. Menees , David A. Nichols , M. Satyanarayanan , Robert N. Sidebotham , Michael J. West, Scale and performance in a distributed file system, ACM Transactions on Computer Systems (TOCS), v.6 n.1, p.51-81, Feb. 1988
- 13 Kempf, J. and Snyder, A., "Persistent Objects on a Database", STL-86-12, HP Labs, September, 1986.
- 14 W. Kim , J. F. Garza , N. Ballou , D. Woelk, Architecture of the ORION Next-Generation Database System, IEEE Transactions on Knowledge and Data Engineering, v.2 n.1, p.109-124, March 1990
- 15 Object Design, Inc., ObjectStore DBMS, 1990.
- 16 Objectivity, Inc., Objectivity/DB, 1990.
- 17 A. Paepcke, PCLOS: a flexible implementation of CLOS persistence, on ECOOP '88 (European Conference on Object-Oriented Programming), p.374-389, August 1988, Oslo, Norway
- 18 Joel E. Richardson , Michael J. Carey, Programming constructs for database system implementation in EXODUS, Proceedings of the 1987 ACM SIGMOD international conference on Management of data, p.208-219, May 27-29, 1987, San Francisco, California, United States
- 19 Herb Schwetman, CSIM: a C-based process-oriented simulation language, Proceedings of the 18th conference on Winter simulation, p.387-396, December 08-10, 1986, Washington, D.C., United States
- 20 Wang, Y., "Cache Consistency and Concurrency Control in a Client/Server DBMS Architecture", ERL M90/120, UC Berkeley, December 1990.
- 21 Weinreb, D., et. al., "An Object-Oriented Database System to Support an Integrated Programming Environment" IEEE Database Engineering Bulletin 11, 2 (June 1988)i 33-43.

22 Kevin Wilkinson , Marie-Anne Neitmat, Maintaining consistency of client-cached data, Proceedings of the sixteenth international conference on Very large databases, p.122-134, September 1990, Brisbane, Australia

↑ CITED BY 33

Zahir Tari , Herry Hamidjaja , Qi Tang Lin, Cache Management in CORBA Distributed Object Systems, IEEE Concurrency, v.8 n.3, p.48-55, July 2000

Ming-Syan Chen , Philip S. Yu, Optimal Design of Multiple Hash Tables for Concurrency Control, IEEE Transactions on Knowledge and Data Engineering, v.9 n.3, p.384-390, May 1997

Ming-Syan Chen , Philip S. Yu , Tao-Heng Yang, On Coupling Multiple Systems With A Global Buffer, IEEE Transactions on Knowledge and Data Engineering, v.8 n.2, p.339-344, April 1996

IY Young Chung , JongMin Lee , Chong-Sun Hwang, A contention based dynamic consistency maintenance scheme for client cache, Proceedings of the sixth international conference on Information and knowledge management, p.363-370, November 10-14, 1997, Las Vegas, Nevada, United States

S. Iris Chu , Marianne Winslett, Minipage locking support for object-oriented page-server DBMS, Proceedings of the third international conference on Information and knowledge management, p.171-178, November 29-December 02, 1994, Gaithersburg, Maryland, United States

Wen-Chi Hou , Meng Su , Hongyan Zhang , Hong Wang, An optimal construction of invalidation reports for mobile databases, Proceedings of the tenth international conference on Information and knowledge management, October 05-10, 2001, Atlanta, Georgia, USA

Zahir Tari , Herry Hamidjaja , Qi Tang Lin, Cache Management in CORBA Distributed Object Systems, IEEE Concurrency, v.8 n.3, p.48-55, July 2000

Markos Zaharioudakis , Michael J. Carey, Highly concurrent cache consistency for indices in client-server database systems, ACM SIGMOD Record, v.26 n.2, p.50-61, June 1997

Jiaxin J. Gao , Dallan Quass , Yiu-Kai Ng, Selective-Splitting and Cache-Maintenance Algorithms for Associative-Client Caches, Distributed and Parallel Databases, v.16 n.1, p.5-43, July 2004

Keqiang Wu , Peng-fei Chuang , David J. Lilja, An active data-aware cache consistency protocol for highly-scalable data-shipping DBMS architectures, Proceedings of the 1st conference on Computing frontiers, April 14-16, 2004, Ischia, Italy

Michael J. Carey , Michael J. Franklin , Markos Zaharioudakis, Fine-grained sharing in a page server OODBMS, ACM SIGMOD Record, v.23 n.2, p.359-370, June 1994

Jayavel Shanmugasundaram , Arvind Nithrakashyap , Rajendran Sivasankaran , Krithi Ramamritham, Efficient concurrency control for broadcast environments, ACM SIGMOD Record, v.28 n.2, p.85-96, June 1999

Hyeokmin Kwon , Songchun Moon, Deferred locking with shadow transaction for client-server DBMSs, Journal of Systems Architecture: the EUROMICRO Journal, v.52 n.7, p.373-393, July 2006

Asit Dan , Philip S. Yu, Performance analysis of coherency control policies through lock retention, ACM SIGMOD Record, v.21 n.2, p.114-123, June 1, 1992

Markos Zaharioudakis , Michael J. Carey, Hierarchical, Adaptive Cache Consistency in a Page Server OODBMS, IEEE Transactions on Computers, v.47 n.4, p.427-444, April 1998

A. Delis , N. Roussopoulos, Performance Comparison of Three Modern DBMS Architectures, IEEE Transactions on Software Engineering, v.19 n.2, p.120-138, February 1993

Meng Su , Chih-Fang Wang , Wen-Chi Hou, An approach of composing near optimal invalidation reports, Proceedings of the 6th international conference on Mobile data management, May 09-13, 2005, Ayia Napa, Cyprus

Michael J. Franklin , Michael J. Zwilling , C. K. Tan , Michael J. Carey , David J. DeWitt, Crash recovery in client-server EXODUS, ACM SIGMOD Record, v.21 n.2, p.165-174, June 1, 1992

Michael J. Carey , David J. DeWitt , Michael J. Franklin , Nancy E. Hall , Mark L. McAuliffe , Jeffrey F. Naughton , Daniel T. Schuh , Marvin H. Solomon , C. K. Tan , Odysseas G. Tsatalos , Seth J. White , Michael J. Zwilling, Shoring up persistent applications, ACM SIGMOD Record, v.23 n.2, p.383-394, June 1994

C. Mohan , Inderpal Narang, ARIES/CSA: a method for database recovery in client-server architectures, ACM SIGMOD Record, v.23 n.2, p.55-66, June 1994

A. Leff , J. L. Wolf , P. S. Yu, Replication Algorithms in a Remote Caching Architecture, IEEE Transactions on Parallel and Distributed Systems, v.4 n.11, p.1185-1204, November 1993

Yixiu Huang , Prasad Sistla , Ouri Wolfson, Data replication for mobile computers, ACM SIGMOD Record, v.23 n.2, p.13-24, June 1994

Kaladhar Voruganti , M. Tamer Özsü , Ronald C. Unrau, An Adaptive Data-Shipping Architecture for Client Caching Data Management Systems, Distributed and Parallel Databases, v.15 n.2, p.137-177, March 2004

Markos Zaharioudakis , Michael J. Carey , Michael J. Franklin, Adaptive, fine-grained sharing in a client-server OODBMS: a callback-based approach, ACM Transactions on Database Systems (TODS), v.22 n.4, p.570-627, Dec. 1997

A. Prasad Sistla , Ouri Wolfson , Yixiu Huang, Minimization of Communication Cost Through Caching in Mobile Environments, IEEE Transactions on Parallel and Distributed Systems, v.9 n.4, p.378-390, April 1998

Vinay Kanitkar , Alex Delis, Time Constrained Push Strategies in Client-Server Databases, Distributed and Parallel Databases, v.9 n.1, p.5-38, January 1, 2001

Vinay Kanitkar , Alex Delis, Real-Time Processing in Client-Server Databases, IEEE Transactions on Computers, v.51 n.3, p.269-288, March 2002

Ibrahim Jaluta , Seppo Sippu , Eljas Soisalon-Soininen, B-tree concurrency control and recovery in page-server database systems, ACM Transactions on Database Systems (TODS), v.31 n.1, p.82-132, March 2006

Alex Delis , Nick Roussopoulos, Techniques for Update Handling in the Enhanced Client-Server DBMS, IEEE Transactions on Knowledge and Data Engineering, v.10 n.3, p.458-476, May 1998

Vinay Kanitkar , Alex Delis, Efficient processing of client transactions in real-time, Distributed and Parallel Databases, v.17 n.1, p.39-74, January 2005

Je-Ho Park , Vinay Kanitkar , Alex Delis, Logically Clustered Architectures for Networked Databases, Distributed and Parallel Databases, v.10 n.2, p.161-198, September 2001

Michael J. Franklin , Michael J. Carey , Miron Livny, Transactional client-server cache consistency: alternatives and performance, ACM Transactions on Database Systems (TODS), v.22 n.3, p.315-363, Sept. 1997

Erhard Rahm, Empirical performance evaluation of concurrency and coherency control protocols for database sharing systems, ACM Transactions on Database Systems (TODS), v.18 n.2, p.333-377, June 1993

↑ INDEX TERMS

Primary Classification:

- H. Information Systems
 - ↪ H.2 DATABASE MANAGEMENT
 - ↪ H.2.4 Systems
 - ↪ Subjects: Concurrency

Additional Classification:

- H. Information Systems
 - ↪ H.2 DATABASE MANAGEMENT
 - ↪ H.2.2 Physical Design
 - ↪ Subjects: Deadlock avoidance
 - ↪ H.2.4 Systems
 - ↪ Subjects: Distributed databases

General Terms:

Algorithms, Experimentation, Performance

↑ Collaborative Colleagues:

Lawrence A. Rowe:	Philippe Aigrain David Bacher J. E Baldeschwieler J. Eric Baldeschwieler Doug Banks David Beech John E. Bell David A. Berger Philip Bernstein Philip A. Bernstein John Boreczky John S. Boreczky Allan Brighton Michael Brodie David W. Brubeck Dick Bulterman Michael Carey Vince Casalaina	Craig Federighi Stu Feldman Richard Fromm Dieter Gawlick D. James Gemmell Kevin L. Gong James Gray Jim Gray Saul Greenberg John Grover Wendy Hall Mark Harrison D. Richard Hill George A. Howlett David Hutchison Ramesh Jain Matthias Jarke	Barbara Liskov Chung Liu Kim Liu Peter C. Lockermann A. Chris Long A. Chris Long Allan C Long Allan Christian Long Jr Long David Maier Radhika Malpani Ketan Mayer-Patel Ketan Dasharath Mayer-Patel Steven McCanne Michael McLennan Eli Messinger Carl Meyer Joseph Michiels	Arturo A. Rodriguez Mark Roseman Hans J. Schek Joachim W. Schmidt Michael Schrefl Steve Seitz Kurt A. Shoens David Simpson Brian Smith Brian C. Smith Stephen Reed Smoot Charles Spirakis Michael Stonebraker Michael R. Stonebraker
-------------------	---	--	---	---

Dave Charness	Dilip D. Kandlur	Thomas M. Morgan	Andrew Swan
Amar Singh	Joe Konstan	Erich J. Neuhold	Allan Tuan
Chaudhary	Joseph A.	John Ousterhout	Mark Ulferts
De Clarke	Konstan	Guru Parulkar	Herrick M. Vin
Charles Crowley	Joseph Andrew	Ketan Patel	Jonathan Walpole
Michael Davis	Konstan	Ketan D. Patel	Yongdong Wang
David J. DeWitt	Ioi Lam	Tom Poindexter	David Wessel
Peter Deutsch	Butler Lampson	P. Venkat Rangan	John R. White
Mark Diekhans	James A. Landay	Andreas Reuter	Darrell Wilson
Charles A. Eads	Don Libes		Terry Winograd
	Bruce Lindsay		Tina Wong
	Bruce G. Lindsay		David Wu
			Raj Yavatkar

Yongdong Lawrence A. Rowe
Wang:

↑ This Article has also been published in:

- **ACM SIGMOD Record**
Volume 20, Issue 2, June 1991

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2007 ACM, Inc.

[Terms of Usage](#) [Privacy Policy](#) [Code of Ethics](#) [Contact Us](#)

Useful downloads:  [Adobe Acrobat](#)  [QuickTime](#)  [Windows Media Player](#)  [Real Player](#)